BOOK REVIEWS

Yearbook of Psychiatry and Applied Mental Health 1989 Edited by JA Talbott, A Frances, DX Freedman, HY Meltzer, JE Schowalter, H Weiner. (Pp 468; £40.00) London, Wolfe Medical 1989

Everyone has their own way of trying to keep up to date with the literature. I have a list of a dozen or so journals on a filing card and I mark the issue that I am up to against each. Another way is to have someone select what you should read, and even, by commenting on abstracts, partly digest it for you. This method is not to my taste, but I can see that it might suit some people, particularly those without access to a good library.

There are 12 sections of abstracts from biological psychiatry to psychotherapy, culled from over 100 journals. Each abstract receives a comment, sometimes as long as the abstract, sometimes only a pithy: "This is a provocative finding" or "These results show the good sense of practising clinicians". Whether practising psychiatrists would demonstrate good sense by buying this book year after year, I doubt. But, a small psychiatric library might well benefit from it.

JOHN CUTTING

Imaging of Non-Traumatic Ischemic and Hemorrhagic Disorders of the Central Nervous System Edited by M Sarwar, Co-edited by S Batnitzky. (Pp 288; UK £83.25; US\$ 135.00; Dfl 325.00.) Dordrecht: Martinus Nijhoff Publishing, 1989

This slim text aims to give an up-to-date review for general radiologists, neurologists and neurosurgeons of the imaging techniques and the reasons for their use in non-traumatic ischaemic and haemorrhagic disorders of the central nervous system. The editors have contributed two thirds of the eight chapters which involve a total of twelve authors.

The first chapter deals solely with the imaging of intracranial haemorrhage by magnetic resonance. It is too detailed for its audience and contains several contradictions; for example, a "stage 1" haemorrhage is defined in the text as from 0–6 to 24 hours but on the accompanying diagram as 0–4 to 36 hours. There are many of these inconsistencies suggesting that the text and the illustrations were not prepared for the same purpose. In general the illustrations are unnecessarily large and this detracts from their quality and clarity. In some places the legend to a figure and its images are separated by many pages. This defect occurs throughout the book and detracts from the overall information that the images are intended to portray.

The second chapter concerns intracranial aneurysms and subarachnoid haemorrhage. Only aneurysms in adults are considered, there is no discussion about neonatal or

juvenile aneurysms. "Spasm" and its treatment are important topics but the possible causes of spasm are considered in a very superficial and over-simplified way. Similarly the discussion of the value of CT scanning in subarachnoid haemorrhage overlooks important recent studies (65% of the references in this chapter are from 1979 or earlier) and does not consider the timing and indications for CT or the indications for follow-up scanning in any detail. The problem of the "angiogram negative" subarachnoid haemorrhage is dismissed too briefly: the view expressed that follow-up angiography is necessary, even after good quality initial angiography, for medico-legal reasons will find little support this side of the Atlantic.

The chapter on intracranial vascular malformations is concise, informative and suited to the proposed audience. In the chapter on atherosclerotic extracranial vascular disease, the radiological investigations possible and their appearances are well covered, but the discussion of their indications is very brief and over-simplified. It is surprising that the authors still consider that plain films of the cervical spine are "very useful" in patients with vertebro-basilar TIAs. The chapter on cerebral infarction is adequate but with little discussion of the controversy about the use or dangers of intravenous contrast agents. The authors indicate that angiography is abnormal in over 50% of cases but do not discuss the indications for its use in the acute situation. Three of the most up-to-date, informative and stimulating chapters were on the smaller topics of non-atherosclerotic lesions of the extracranial vasculature, dural sinus thrombosis and neonatal haemorrhage.

The authors fall short of their aim to provide an up-to-date synthesis of current views in many of the major topics considered. The layout of the large illustrations is persistently irritating and difficult to follow. At a cost of just over £83 it cannot be recommended.

E TEASDALE

Multiple sclerosis: A Conceptual Reappraisal with Heuristic Implications. By EJ FIELD. (Pp 255; \$49.75.) Illinois: Charles C Thomas, 1988

EJ Field's conceptual reappraisal of multiple sclerosis is valuable as the permanent record of work carried out by an investigator who has devoted many years to the study of demyelinating disease and it contains some constructive ideas but in the end it tells us a lot about Field and not much about multiple sclerosis. Few would disagree with some of the facts accommodated within Professor Field's hypothesis; some commentators have already been outspoken about the laboratory observations on which it is based; most neurologists would be very reluctant to follow the directions in which the heuristic implications have led the author; and everyone will despair of a book that sets out to settle old scores. Although the hypothesis is not stated in its entirety, one reading of this book is that multiple sclerosis is an inherited disease in which myelin is structurally defective and abiotrophic, and therefore does not last; specifically, adhesion between myelin lamellae is weak so that the myelin sheets

easily spring apart. The mechanism of the HLA associations is that HLA epitopes contribute additional binding forces—Dw2 positive myelin is springier than others. The disease process is diffuse but results in focal accumulations of degraded myelin that are awaiting export from the nervous system—the perivascular plaques; the intrinsic defect of myelin is part of a generalised alteration in membranes and can be detected by the abnormal mobility of red cells using stringent laboratory conditions. The disorder has increased in frequency because of substantial alterations in dietary habits in the western world over the last century, presumably acting in inherently susceptible populations; and the membrane diathesis can be corrected by essential fatty acids—most conveniently given as Nudicelle—thereby raising the possibility of eradicating the disease.

Professor Field makes several valid points; there is a good historical chapter which emphasises the genetic basis of multiple sclerosis; he rightly reminds us that, in vivo, lymphocytes do not directly damage myelin—the role of macrophages in this respect was clearly illustrated by Babinski and Dawson—and he also presents evidence for myelin injury occurring in the total absence of inflammatory cells; the author presents a balanced argument against using experimental allergic encephalomyelitis as a model of multiple sclerosis. And, throughout the book important publications are identified which are not well known; this reviewer must be counted amongst modern writers on multiple sclerosis whose ignorance of Hassin's 1922 and 1937 papers is 'truly remarkable'; and these papers are of great interest.

The E-UFA test, and its PL-EUFA (Office) and He-Ne UV filter laser modifications, are central to Field's hypothesis and he believes that they enable the diagnosis of multiple sclerosis to be confirmed or set aside when the first suggestive symptom or sign appears; 'indeed we can pick out children with the inborn diathesis which makes them a candidate in later life. A rational handling before clinical appearance of multiple sclerosis is available. Only those with the diathesis can develop multiple sclerosis'. Although others have found that the assay varies considerably in its reproducibility, Field attributes these inconsistencies in part to the fact that many drugs, including steroids, or diets and smoking modify the test.

Part of the book is devoted to an analysis of family studies in patients with multiple sclerosis using one or other of the tests already described. Here Field seeks to establish the extent to which multiple sclerosis or the red cell diathesis is more common in each category of relative than in the general population. Taking an assumed population prevalence of 60/100000 Field substitutes figures for observed or subjectively reported instances of multiple sclerosis in the relatives of those who have sought his advice, and applies the results of the E-UFA test. Leaving aside the epidemiologically suspect nature of his sample, the lack of any laboratory controls, and conceptual errors ('if we split the 60/100000 multiple sclerosis subjects into male and female in the ratio of 3/2 [the sex differential] then there are actually 36/100000 females and 24/100000 males affected in England'—the rates are in fact 72 and 48/100000) many of the sums are simply wrong, sometimes by a factor of 350%. The putative outbreak of multiple sclerosis in the Faroe

Islands is attributed to red squares (jargon for diathesis positives males) amongst the Allied troops fraternising with female islanders during the second world war—seemingly in defiance of conventional rules of gestation since many of the affected patients were born before the war.

Later, Field strays from the genetics of multiple sclerosis to embrace several other disorders under a unitary hypothesis of membrane structure. The text is liberally sprinkled with quotations, many unattributed, but perhaps more than any other part this passage epitomises the type of evidence on which this book will have to be judged. Finally, in support of his hypothesis, Field dismantles the evidence that steroids and all forms of immunosuppression have a role in the treatment of multiple sclerosis and recommends instead a regimen consisting of various preparations of Naudicelle, vitamins E and C, a low animal fat diet, living in peace, tepid baths, and never swimming unaccompanied. In addressing the question 'can multiple sclerosis be virtually eradicated?' he highlights the issue that has dismayed many neurologists dealing with distraught parents who have been advised that their family has the multiple sclerosis diathesis. He advocates Naudicelle twice daily in young children increasing to six tablets after ten years and has little sympathy for negative responses—'usually professional . . . or ostrich attitudes . . . often encountered in medical practitioners'—to his counsel. Many readers are going to find it hard to accept the Lamarckian position that the inherited defect of myelin underlying multiple sclerosis would be corrected, and the condition eradicated, if all red circles (women with the multiple sclerosis diathesis) were to restrain from pregnancy until the red cell abnormality has been restored to normal by treatment with essential fatty acids.

When it comes to his critics, Professor Field pulls no punches. 'Alvord's opinion has . . . been as fluctuating as is the course of multiple sclerosis . . . in 1984 he was in one of his up phases of belief'. He swipes gratuitously at grant giving agencies and young scientists brainwashed by the dogmatic opinions of their supervisors; 'without interrupting the continuous clicking of his hand counter, the researcher looked up to pass the time of day . . . the old man (an eminent authority on lymphocyte traffic) was expecting a high result and this [would] please him' may belong in a book of medical cartoons but does not illuminate a serious scientific document. A nursing officer who smoked heavily and could presumably recognise herself is castigated for contaminating the E-UFA apparatus so that it had to be washed out with 1 litre of distilled water. And in an astonishing outburst, failure of the neurological community to take up the E-UFA test is attributed not to its deficiencies, or any lack of sensitivity and specificity (4 false positives are described) but to a political conspiracy lead by the then Secretary of the MRC (Sir John Grey) 'who had just recovered from a prolonged illness . . . subsequently had to take very early departure from the MRC . . . [and closed] the only unit specifically devoted to the elucidation of multiple sclerosis . . . by which time the damage was done and the knowledge on the advances made in recognising the multiple sclerosis diathesis were quashed'. Field then lashes out at three neurologists—Reginald Kelly, Helmut Bauer and John Walton—for

incompetent handling of the facts in their muddled assessments of his work. He introduces and then names the young neurologist 'who spent 4 working days in our laboratory during which he . . . spent a bare ten minutes seeing how the cells move drawing the comment that one will hardly become a pianist by watching Claudio Arrau at work! In his discussion of the epidemiological aspects of multiple sclerosis, Field pokes at 'a world famous children's hospital in London and an equally famous hospital for nervous disease' (can anybody help with the identities?) where a case of multiple sclerosis defied diagnosis but was subsequently picked up by clinical examination and family E-UFA studies. The author warms up the final two chapters with a further outburst against granting agencies—mostly his old enemy the MRC—and goes over the same Kelly, Bauer, Walton routine, adding a fourth muskateer (David Bates). Those who carry out clinical trials receive a severe wiggling for employing defective methodology but some of Field's ideas are bizarre—'the only proper controls for a clinical trial of patients with multiple sclerosis is (sic) those with neurosyphilis, massive gliomata, advanced arteriosclerosis and alcoholism'. Some may also find excessive the self-congratulatory references to the author's publications and entries in Citation Classics.

Lively debate, refuting dogma that has not illuminated difficult problems, and adventurous thinking are essential for scientific progress and those who break new ground often have to be persistent in the face of criticism. EJ Field has made observations in the laboratory from which he has constructed an hypothesis which he believes to be correct; others do not share his conviction. The treatment Field recommends seems to be harmless but in negotiating the difficult interface between research and clinical practice, the hopes and fears of vulnerable individuals must never be exploited.

ALASTAIR COMPSTON

Childhood Epilepsies: Neuropsychological, Psychosocial and Intervention Aspects. Edited by: BRUCE P HERMANN, MICHAEL SEIDENBERG. (Pp 264; £26.95.) Bognor Regis, John Wiley & Sons Limited, 1989.

This is a multiauthored book, sixth in the Wiley Series on Studies in Child Psychiatry, edited by two American psychologists. I can not say that I picked up this book with much enthusiasm for, with the current explosion of medical publishing, numerous volumes of this sort exist. These are of limited (if any) value acting mainly to clutter libraries and service bibliographies. Such prejudice proved unjust; this book is very useful; most chapters are well written and cover a range of subjects beyond the usual melange. There are four major parts to the book. First, are medically orientated chapters, including excellent chapters on the classification of childhood epilepsies by Dreifuss, and by Zeilinski on the associations of childhood epilepsy and mental retardation. This latter chapter is exceptionally clear and interesting on an often murky and confusing subject. Second, are chapters concerned with neuropsychological functioning, including aca-

demic achievement, cognitive function and psychological prognosis. Third, are three chapters concerned with the effects of epilepsy on behaviour and social adjustment. David Taylor is good on the difference between epilepsy—the illness, and epilepsy—the predicament. The predicament encompasses such psychosocial constructs as pseudo-death, hyperpaedophilia, and paroxysmal displays; and (as is characteristic of the author) this is original and stimulating, and is followed by an excellent exposition of the sociology of epilepsy. Finally, there are chapters concerned with treatment, here interpreted in its widest sense incorporating psychological and vocational intervention (Schotte and DuBois), as well as surgery (Wylie). Indeed, the emphasis on psychology and on wider social and behavioural issues is a common and instructive theme. The editors are to be congratulated on a well conceived and tightly edited volume, which is also refreshingly original.

SD SHORVON

Nerve Growth Factors. Ibro Handbook Series: Methods in the Neurosciences Vol. 12. Edited by: R A RUSH. (Pp 351; £47.50). Chichester: John Wiley & Sons Ltd, 1989.

This volume dedicated to Nerve Growth Factors represents a further excellent contribution to the IBRO Handbook Series. The hardbacked book contains 17 chapters written by leading scientists. The chapters cover a wide range of techniques which are currently available for the investigation of the role and significance of Nerve Growth Factors in the nervous system. Fittingly, the foreword, written by Professor Levi-Montalcini acknowledges the wealth of sophisticated methods now available and challenges the present generation to reveal novel aspects of the neurobiology of nerve growth factors. The major focus of the book is on nerve growth factor, although specific chapters deal with other growth factors such as ciliary neurotrophic factors and neuroleukin. However, many of the techniques described offer a general applicability for investigation of other trophic factors. The book is designed for use as a laboratory manual. The volume is divided into six major sections which deal with methodological aspects of purification and bioassay systems for nerve growth factors, histological localisation of nerve growth factor and its mRNA, administration of nerve growth factor and antibodies to nerve growth factor, molecular biological techniques for the structural analysis and assay of nerve growth factor and a final section dedicated to receptor technologies, namely purification, characterisation, quantification and molecular cloning. An introduction to each of these subjects is given. This is well referenced with background reading. The remainder of each chapter is largely devoted to a comprehensive description of the method. Some chapters also include appendices. In many instances to add clarification to specific points and technical details are nicely illustrated high quality black and white photographs and/or line drawings. Perhaps an indication of the usefulness of this book is that on reading each of the chapters, even if one is not conversant with the method one would feel confident to try the method.